Soil Surveys Engineering Pty. Limited
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BOREHOLE RECORD SHEET

Location Number: BH 301

Project Number: 110-12936
Project Name: Cross River Rail
Location: Brisbane
Client: AECOM
Date: 21/11/2011

Easting: 503363 Northing: 6960753 RL: -11.37 m
Logger: DA/DT Operator: SO Machine: Scout 2

Drilling Method (TC / WB / RR / NMLC / Casing)	Depth	Graphic	Description	Weathering	Strength (Estimated: RS VW W MS S VS ES)	Defect Spacing (20 60 200 600)	Rec (%)	RQD	Samples and Remarks
	0.00		Silty CLAY (CH) Very soft, high plasticity, dark grey, with organics and wood pieces.						
	2.75		Sandy GRAVEL (GP) Medium dense, fine to medium size, grey and brown, fine to coarse grained sand.						
	3.60		Sandy CLAY (CH) Hard, high plasticity, orange brown and light grey, fine to coarse grained sand.						
	6.00		TUFF (XW) Very weak, light grey mottled orange brown.						SPT 18, 24, 30/120mm N=R
	8.50		TUFF (DW) Weak, light grey mottled orange brown.						SPT 30/85mm N=R
	10.0 ▽								

Comments:
1) Drilled from floating barge - all depths measured from river bed level. 2) Note: the coring method used was NQ3 not NMLC. 3) Borehole grouted on completion.

▽ Water First Noted ▼ Water Steady Level

Defects - 1.54m : F,60°,P,R,O,C

Depth (m) | Type: B - Bedding, C - Clay seam, F - Foliation, H - Schistosity, J - Joint, L - Cleavage, R - Fracture, S - Shear zone, T - Contact, V - Vein, Z - Decomposed Zone, DI - Drilling Induced break | Dip (deg) | Planarity: C - Curvilinear, D - Discontinuous, P - Planar, S - Subplanar, T - Stepped, U - Undulating | Roughness: L - Slickensides, P - Polished, R - Rough, S - Smooth, V - Very rough | Aperature: C - Closed, F - Filled, N - Clean, O - Open, S - Stain | Infill: C - Clay, F - Iron Oxide, K - Calcite, L - Limonite, Q - Quartz, S- Secondary mineral, U - Unidentified mineral, W - Weathered rock, X - Carbonaceous, Z - Clean

Weathering Grades
RS - Residual Soil
XW - Extremely weathered
DW - Distinctly weathered
SW - Slightly weathered
FR - Fresh

Rock Strength
VW - Very weak
W - Weak
MS - Medium strong
S - Strong
VS - Very strong
ES - Extremely strong

Samples
U50
SPT
Disturbed Sample

Approved:
Date:

SOIL_SURVEYS_00 LIBRARY 2012-05.GLB Log SOIL SURVEY BOREHOLE LOG 111-12936 NEW.GPJ <<DrawingFile>> 21/05/2012 14:30 8.30.002 Developed by Datgel

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BOREHOLE RECORD SHEET

Location Number: BH 301

Project Number: 110-12936
Project Name: Cross River Rail
Location: Brisbane
Client: AECOM
Date: 21/11/2011

Easting: 503363 Northing: 6960753 RL: -11.37 m
Logger: DA/DT Operator: SO Machine: Scout 2

Depth	Graphic	Description	Weathering	Strength (Estimated)	Defect Spacing	Rec (%)	RQD	Samples and Remarks
10.25								
		TUFF, fine grained, pale grey stained orange brown, granular, thickly bedded, closely spaced fractures.	DW					10.37 m; J, **60°**, P, R, O, L 10.55 m; J, **45°**, P, R, O, L
11.0								10.90 m; J, **70°**, C, R, O, L 11.00 m; J, **70°**, P, R, O, L 11.10 m; J, **10°**, P, R, O, L
						80	40	
11.85								11.43 m; J, **65°**, P, R, O, L 11.51 m; J, **20°**, P, S, O, L 11.55 m; J, **30°**, P, R, O, L 11.65 m; J, **10°**, P, R, O, L 11.68 m; J, **70°**, S, R, O, L 11.75 m; J, **20°**, P, R, O, L
12.0		CORE LOSS 0.40m (11.85-12.25)						
12.25								
		TUFF, fine grained, dark grey stained orange brown, granular, thickly bedded, very closely spaced fractures.	DW - SW					12.40 m; J, **30°**, P, R, O, Z
12.70								
		CORE LOSS 0.30m (12.70-13.00)						
13.0								
13.00		TUFF, fine grained, dark grey, thickly bedded, fragmented to extremely close fractures, some limonite in fractures.	SW					13.15 m; J, **85°**, U, R, O, L
13.45								13.45 m; J, **75°**, P, R, O, Z
		SILTSTONE, fine grained, dark grey, thinly laminated with closely spaced fractures.	FR			89	32	13.67 m; J, **85°**, P, R, O, W 13.74 m; J, **5°**, P, R, O, W
13.85								
14.0		Interlaminated SILTSTONE and SANDSTONE, fine grained, alternating pale grey and dark grey, granular, thinly laminated, very closely to moderately widely spaced fractures.						14.12 m; DI, **10°**, P, R, O, Z 14.28 m; DI, **10°**, P, R, O, Z
15.0								14.82 m; DI, **27°**, P, R, O, Z 14.83 m; DI, **20°**, P, R, O, Z 14.95 m; DI, **10°**, P, R, O, Z
15.00		CONGLOMERATE, coarse grained, pale grey white speckled dark grey, granular, massively bedded, closely spaced to moderately widely spaced fractures. Clasts are coarse gravel sized sub-rounded Siltstone, Sandstone and Quartz. Coarse Sandstone lense from 15.95m to 16.09m. Clast supported.						15.36 m; J, **10°**, P, V, O, Coal
16.0								16.10 m; DI, **10°**, U, V, O, Z 16.25 m; DI, **5°**, S, V, O, Z 16.35 m; DI, **5°**, U, V, O, Z 16.44 m; DI, **5°**, S, V, O, Z
						100	90	
17.0								16.77 m; DI, **10°**, S, V, O, Z 17.20 m; J, **10°**, C, V, O, Z 17.37 m; DI, **10°**, U, V, O, Z
18.0								17.81 m; DI, **15°**, U, V, O, Z
								18.65 m; DI, **15°**, C, V, O, Z
19.0						100	80	
								19.6m, Is50 = 1.26 MPa 19.51 m; DI, **15°**, S, V, O, Z 19.68 m; DI, **5°**, S, V, O, Z
20.0								20m, Is50 = 1.13 MPa

Drilling Method: TC, WB, RR, NMLC, Casing

Comments:
1) Drilled from floating barge - all depths measured from river bed level. 2) Note: the coring method used was NQ3 not NMLC. 3) Borehole grouted on completion.

Water First Noted Water Steady Level

Defects - 1.54m : F,60°,P,R,O,C

Depth (m) | Type: B - Bedding, C - Clay seam, F - Foliation, H - Schistosity, J - Joint, L - Cleavage, R - Fracture, S - Shear zone, T - Contact, V - Vein, Z - Decomposed Zone, DI - Drilling Induced break | Dip (deg) | Planarity: C - Curvilinear, D - Discontinuous, P - Planar, S - Subplanar, T - Stepped, U - Undulating | Roughness: L - Slickensides, P - Polished, R - Rough, S - Smooth, V - Very rough | Aperature: C - Closed, F - Filled, N - Clean, O - Open, S - Stain | Infill: C - Clay, F - Iron Oxide, K - Calcite, L - Limonite, Q - Quartz, S- Secondary mineral, U - Unidentified mineral, W - Weathered rock, X - Carbonaceous, Z - Clean

Weathering Grades
RS - Residual Soil
XW - Extremely weathered
DW - Distinctly weathered
SW - Slightly weathered
FR - Fresh

Rock Strength
VW - Very weak
W - Weak
MS - Medium strong
S - Strong
VS - Very strong
ES - Extremely strong

Samples
U50
SPT
Disturbed Sample

Approved:
Date:

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BOREHOLE RECORD SHEET

Location Number: BH 301
Project Number: 110-12936
Project Name: Cross River Rail
Location: Brisbane
Client: AECOM
Date: 21/11/2011

Easting: 503363 Northing: 6960753 RL: -11.37 m
Logger: DA/DT Operator: SO Machine: Scout 2

Depth	Graphic	Description	Weathering	Strength (Estimated)	Defect Spacing	Rec (%)	RQD	Samples and Remarks
			FR					19.90 m; J, **18°,** P, R, O, Z
								20.20 m; J, **30°,** S, V, O, Z
						100	80	
20.80								20.61 m; J, **35°,** U, V, O, Z
21.0		CONGLOMERATE, coarse grained, pale grey white speckled dark grey, granular, massively bedded, fragmented to closely spaced fractures. Clasts are coarse gravel sized, sub-rounded of Siltstone, Sandstone and Quartz. Clast supported.						
21.30		SANDSTONE, fine grained, pale grey with some darker layers, granular, thinly bedded, closely spaced fractures. Siltstone bands from 21.8m to 21.9m and 22.28m to 22.3m. Trace of siltstone laminae.						21.30 m; DI, **10°,** P, S, O, Z 21.40 m; J, **10°,** P, S, O, Coal 21.57m, Is50 = 2.73 MPa
22.0						100	90	
22.33		CONGLOMERATE, coarse grained, pale grey white speckled dark grey, granular, massively bedded, closely spaced to moderately widely spaced fractures. Clasts are coarse gravel sized, sub-rounded of Siltstone, Sandstone and Quartz. Clast supported. With a fine Sandstone band from 22.60m to 22.83m.						22.27 m; DI, **80°,** P, R, O, Z 22.33 m; DI, **10°,** U, V, O, Z
22.83								22.60 m; J, **60°,** P, R, O, Z 22.82m, Is50 = 2.45 MPa 22.81 m; J, **20°,** P, R, O, Z
23.0								
23.00								23.00 m; J, **10°,** P, S, O, Coal
23.80		CONGLOMERATE, coarse grained, pale white grey, granular, medium bedding, moderately widely spaced fractures. Clasts are coarse gravel sized, sub-rounded of Siltstone, Sandstone and Quartz. Clast supported. Coarsening upward sequence. 3mm of coal at 28.0m.				100	100	23.60 m; J, **10°,** P, S, O, Coal
24.0								
		Interlaminated SILTSTONE and SANDSTONE, fine grained, alternating pale grey and dark grey, granular, thinly laminated, moderately widely spaced fractures. Coal laminae from 23.0m to 23.13m.						
25.0								25.1m, Is50 = 0.84 MPa
								25.20 m; DI, **20°,** U, V, O, Z
		CONGLOMERATE, coarse grained, pale grey white speckled dark grey, granular, massively bedded, widely spaced fractures. Clasts are fine gravel sized, sub-rounded of Siltstone, Sandstone and Quartz. Clast supported.						
26.0								
26.30		CONGLOMERATE, coarse grained, pale grey white speckled dark grey, granular, massively bedded, closely spaced fractures. Clasts are medium gravel sized, sub-rounded of Siltstone, Sandstone and Quartz. Clast supported.				100	100	26.29 m; DI, **15°,** U, V, O, Z
27.0								26.80 m; DI, **10°,** U, V, O, Z
								27.13 m; DI, **5°,** U, V, O, Z 27.25m, Is50 = 1.75 MPa 27.25 m; DI, **5°,** C, V, O, Z
27.75								
28.0		CONGLOMERATE, coarse grained, pale grey, granular, massive bedding, moderately widely spaced fractures. Clasts are medium sized sub-rounded Siltstone, Sandstone and Quartz. Clast supported. Coarse sand lenses from 27.8m to 27.88m, 28.05m to 28.1m and 28.44m to 28.48m.						28.12m, Is50 = 0.49 MPa 28.21m, Is50 = 1.75 MPa
28.50								28.30 m; J, **89°,** S, V, O, Z
29.0		CONGLOMERATE, coarse grained, pale white grey, granular, massively bedded, moderately widely spaced fracturing. Clasts are coarse gravel sized, sub-rounded of Siltstone, Sandstone and Quartz. Clast supported. Some lenses of fine gravel from 30.40m to 30.55m and 30.80m to 30.95m.				100	85	29.08 m; DI, **10°,** P, V, O, Z
30.0								

Drilling Method: TC, WB, RR, NMLC, Casing

Comments:
1) Drilled from floating barge - all depths measured from river bed level. 2) Note: the coring method used was NQ3 not NMLC. 3) Borehole grouted on completion.

Water First Noted Water Steady Level

Defects - 1.54m : F,60°,P,R,O,C

Depth (m) | Type: B - Bedding, C - Clay seam, F - Foliation, H - Schistosity, J - Joint, L - Cleavage, R - Fracture, S - Shear zone, T - Contact, V - Vein, Z - Decomposed Zone, DI - Drilling Induced break | Dip (deg) | Planarity: C - Curvilinear, D - Discontinuous, P - Planar, S - Subplanar, T - Stepped, U - Undulating | Roughness: L - Slickensides, P - Polished, R - Rough, S - Smooth, V - Very rough | Aperature: C - Closed, F - Filled, N - Clean, O - Open, S - Stain | Infill: C - Clay, F - Iron Oxide, K - Calcite, L - Limonite, Q - Quartz, S- Secondary mineral, U - Unidentified mineral, W - Weathered rock, X - Carbonaceous, Z - Clean

Weathering Grades
RS - Residual Soil
XW - Extremely weathered
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Rock Strength
VW - Very weak
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MS - Medium strong
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Samples
U50
SPT
Disturbed Sample

Approved:
Date:

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BOREHOLE RECORD SHEET

Location Number: BH 301

Project Number: 110-12936
Project Name: Cross River Rail
Location: Brisbane
Client: AECOM
Date: 21/11/2011

Easting: 503363 Northing: 6960753 RL: -11.37 m
Logger: DA/DT Operator: SO Machine: Scout 2

Depth	Graphic	Description	Weathering	Strength (Estimated)	Defect Spacing	Rec (%)	RQD	Samples and Remarks
31.0		CONGLOMERATE, coarse grained, pale white grey, granular, massively bedded, moderately widely spaced fracturing. Clasts are coarse gravel sized, sub-rounded of Siltstone, Sandstone and Quartz. Clast supported. Some lenses of fine gravel from 30.40m to 30.55m and 30.80m to 30.95m. *(continued)*	FR			100	85	30.27 m; DI, **21°,** U, V, O, Z 30.50 m; J, **15°,** P, S, O, Z
31.47								31.29m, Is50 = 0.31 MPa
31.86		SILTSTONE, fine grained, dark grey with some pale grey layers, laminated, extremely closely spaced fractures. Some rounded coarse gravel clasts at 31.77m.						31.48-31.85 m; B, **5°,** P, S, O, Z
32.0		CONGLOMERATE, coarse grained, pale white grey with some darker grey clasts, gravel clasts are medium sized, sub-rounded, with trace fine cobbles, clast supported, massively bedded, moderately widely spaced fractures. With a thin band of diagenetic quartz at 33.0m and a band of fine grained foliated Phyllite from 35.46m to 35.62m.				100	89	32.20 m; DI, **20°,** P, R, O, Z 32.67m, Is50 = 2.22 MPa
33.0								33.23m, Is50 = 0.37 MPa 33.32 m; J, **30°,** P, R, O, Z 33.47 m; J, **40°,** C, R, O, Z
34.0								34m, Is50 = 1.98 MPa
35.0						100	84	34.37 m; DI, **20°,** U, S, O, Z
35.62								35.30 m; J, **35°,** P, S, O, Z 35.57m, Is50 = 2.73 MPa
35.88		CONGLOMERATE, pale white grey with some darker grey clasts, gravel clasts are medium sized sub-rounded, with trace fine cobbles, clast supported, massively bedded, closely spaced fractures, quartzite bands from 35.73m to 35.78m and 35.85m to 35.88m.						35.80 m; J, **40°,** P, S, O, Z 35.87 m; J, **40°,** C, R, O, Z
36.0		BOREHOLE BH 301 TERMINATED AT 35.88 m						
37.0								
38.0								
39.0								
40.0								

Drilling Method: TC, WB, RR, NMLC, Casing

Comments:
1) Drilled from floating barge - all depths measured from river bed level. 2) Note: the coring method used was NQ3 not NMLC. 3) Borehole grouted on completion.

Water First Noted Water Steady Level

Defects - 1.54m : F,60°,P,R,O,C

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Samples
U50
SPT
Disturbed Sample

Approved:
Date:

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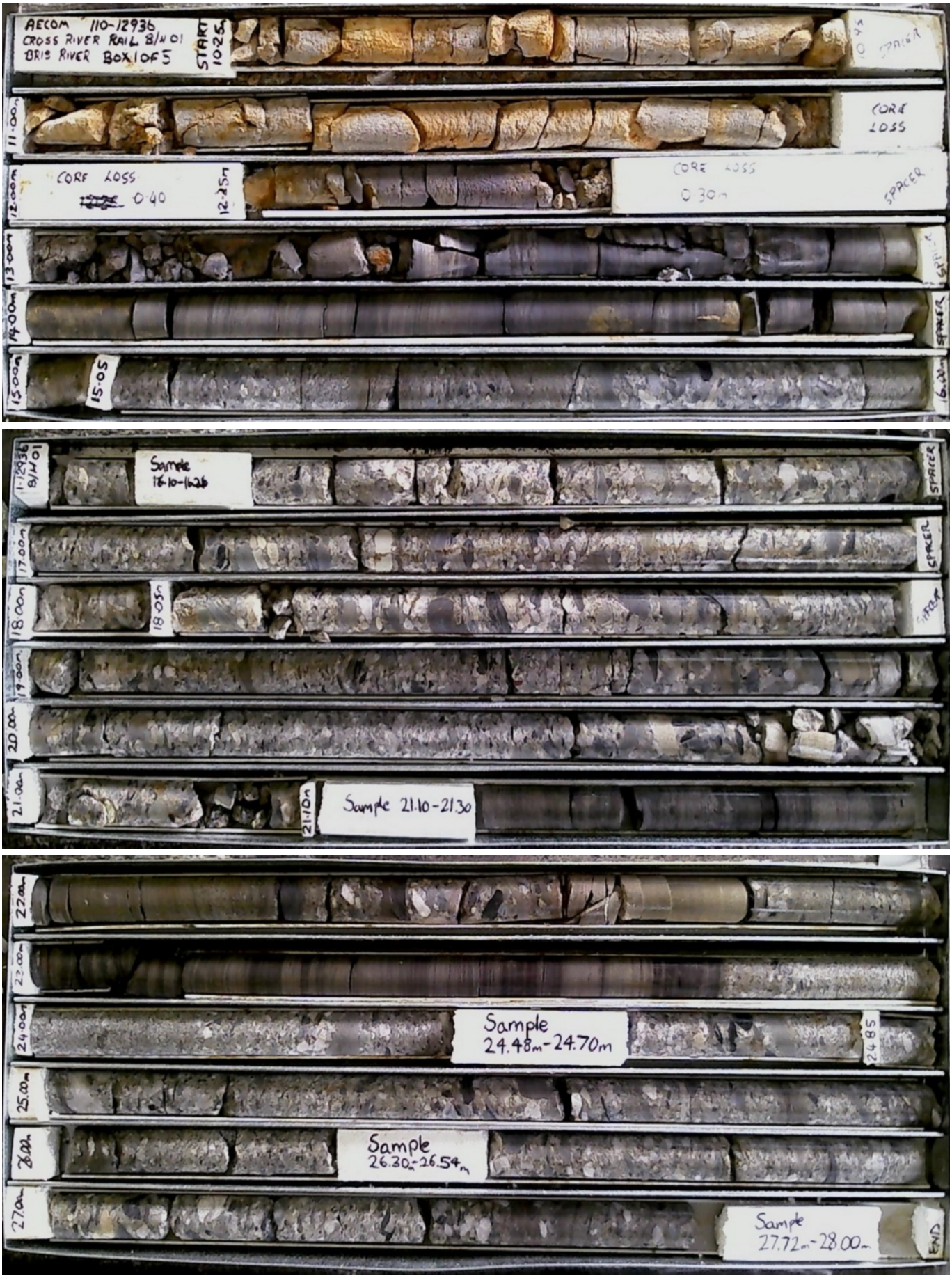

SOIL SURVEYS	TITLE: AECOM Brisbane Cross River Rail Core Photo - BH 301	DRAWN: DT	DATE: 26/04/2012
		CHECKED: CB	DATE: 26/04/2012
		SCALE: Not To Scale	A4
		PROJECT No: 110-12936	FIGURE No: 1/2

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SOIL SURVEYS

TITLE

AECOM
Brisbane
Cross River Rail
Core Photo - BH 301

DRAWN	DT	DATE	26/04/2012
CHECKED	CB	DATE	26/04/2012
SCALE	Not To Scale		A4
PROJECT No	110-12936	FIGURE No	2/2

SOIL_SURVEYS_00 LIBRARY.GLB GrfcTbl DG PHOTO CORE PHOTO 4 PER PAGE 111-12936 NEW.GPJ <<DrawingFile>> 26/04/2012 14:47 8.2.856 Developed by Datgel

IN-SITU PACKER PERMEABILITY TEST RESULT

PROJECT: CRR
PROJECT No.: 110-12936
BH No.: 301
Test No.: 1
Date: 24/11/2011

Packer type: Single
Packer pressure: 2000kPa
Gauge pressures measured in: kPa
Tested by: CS

Vertical depth to: (below river bed)

Top of test section (m):	19.00
Base of test section (m):	21.00
Centre of test section(m):	20.00
Base of casing (m):	18.00
Ground water (m)	TIDAL

Depth of centre of test section (m):	20.00
Length of test section (m):	2.00

Gauge Height above ground level (m):	
Hole Diameter in test section (mm)	75

1st period	Time (mins)	0	5	10	15	Average
Gauge Pressure 75	Flow reading	30.0	30.0	30.2	30.5	Flow (l/min)
	Water Take	0.00	0.00	0.20	0.30	0.033
2nd period	Time (mins)	0	5	10	15	Average
Gauge Pressure 150	Flow reading	32.5	32.6	33.0	33.5	Flow (l/min)
	Water Take	0.00	0.10	0.40	0.50	0.067
3rd period	Time (mins)	0	5	10	15	Average
Gauge Pressure 300	Flow reading	35.5	35.9	36.9	37.5	Flow (l/min)
	Water Take	0.00	0.00	1.00	0.60	0.107
4th period	Time (mins)	0	5	10	15	Average
Gauge Pressure 150	Flow reading	37.5	37.4	37.5	37.8	Flow (l/min)
	Water Take	0.00	-0.10	0.10	0.30	0.020
5th period	Time (mins)	0	5	10	15	Average
Gauge Pressure 75	Flow reading	37.6	37.6	37.6	37.6	Flow (l/min)
	Water Take	0.00	0.00	0.00	0.00	0.000

Period	Flow (q) (l/min)	Gauge Press (kPa)	Gauge Press (m of water)	Friction Loss (m)*		Total Head (m)	Lugeon Value	Perm. (m/s)
				Basic	In extra rods			
1st	0.033	75.00	7.665	0.000	0.000	27.665	0.062	6.35E-09
2nd	0.067	150.00	15.330	0.000	0.000	35.330	0.096	9.94E-09
3rd	0.107	300.00	30.660	0.000	0.000	50.660	0.108	1.11E-08
4th	0.020	150.00	15.330	0.000	0.000	35.330	0.029	2.98E-09
5th	0.000	75.00	7.665	0.000	0.000	27.665	0.000	0.00E+00

*Where friction loss is assumed to be negligible.

N.B. Pressure Conversion: 1 bar = 100 kPa = 14.503 psi

SOIL SURVEYS ENGINEERING

IN-SITU PACKER PERMEABILITY TEST RESULT

PROJECT: CRR
PROJECT No.: 110-12936
BH No.: 301
Test No.: 2
Date: 24/11/2011

Packer type: Single
Packer pressure: 2000kPa
Gauge pressures measured in: kPa
Tested by: CS

Vertical depth to: (Below River bed)

Top of test section (m):	24.00
Base of test section (m):	28.00
Centre of test section(m):	26.00
Base of casing (m):	23.00
Ground water (m)	TIDAL

Depth of centre of test section (m):	26.00
Length of test section (m):	4.00

Gauge Height above ground level (m):	
Hole Diameter in test section (mm)	75

1st period	Time (mins)	0	5	10	15	Average
Gauge Pressure	Flow reading	41.8	44.0	44.8	45.4	Flow (l/min)
100	Water Take	0.00	2.20	0.80	0.60	0.240
2nd period	Time (mins)	0	5	10	15	Average
Gauge Pressure	Flow reading	51.8	55.0	56.2	58.5	Flow (l/min)
200	Water Take	0.00	3.20	1.20	2.30	0.447
3rd period	Time (mins)	0	5	10	15	Average
Gauge Pressure	Flow reading	60.0	65.0	68.0	71.0	Flow (l/min)
300	Water Take	0.00	0.00	3.00	3.00	0.400
4th period	Time (mins)	0	5	10	15	Average
Gauge Pressure	Flow reading	87.0	89.0	91.0	93.0	Flow (l/min)
200	Water Take	0.00	2.00	2.00	2.00	0.400
5th period	Time (mins)	0	5	10	15	Average
Gauge Pressure	Flow reading	93.0	93.0	93.0	93.0	Flow (l/min)
100	Water Take	0.00	0.00	0.00	0.00	0.000

Period	Flow (q) (l/min)	Gauge Press (kPa)	Gauge Press (m of water)	Friction Loss (m)*		Total Head (m)	Lugeon Value	Perm. (m/s)
				Basic	In extra rods			
1st	0.240	100.00	10.220	0.000	0.000	36.220	0.169	2.05E-08
2nd	0.447	200.00	20.440	0.000	0.000	46.440	0.246	2.97E-08
3rd	0.400	300.00	30.660	0.000	0.000	56.660	0.180	2.18E-08
4th	0.400	200.00	20.440	0.000	0.000	46.440	0.220	2.66E-08
5th	0.000	100.00	10.220	0.000	0.000	36.220	0.000	0.00E+00

*Where friction loss is assumed to be negligible.

N.B. Pressure Conversion: 1 bar = 100 kPa = 14.503 psi

Note - flows during 3rd period adjusted for loss through pressure head

SOIL SURVEYS ENGINEERING

IN-SITU PACKER PERMEABILITY TEST RESULT

PROJECT: CRR
PROJECT No.: 110-12936
BH No.: 301
Test No.: 3
Date: 24/11/2011

Packer type: Single
Packer pressure: 2000kPa
Gauge pressures measured in: kPa
Tested by: CS

Vertical depth to: (below river bed)

Top of test section (m):	29.00
Base of test section (m):	33.00
Centre of test section(m):	31.00
Base of casing (m):	28.00
Ground water (m)	TIDAL

Depth of centre of test section (m):	31.00
Length of test section (m):	4.00

Gauge Height above ground level (m):	
Hole Diameter in test section (mm)	75

1st period	Time (mins)	0	5	10	15	Average
Gauge Pressure 75	Flow reading	100.0	100.5	101.0	101.6	Flow (l/min)
	Water Take	0.00	0.50	0.50	0.60	0.107
2nd period	Time (mins)	0	5	10	15	Average
Gauge Pressure 150	Flow reading	103.0	104.5	106.8	108.0	Flow (l/min)
	Water Take	0.00	1.50	2.30	1.20	0.333
3rd period	Time (mins)	0	5	10	15	Average
Gauge Pressure 225	Flow reading	109.6	124.0	124.0	124.0	Flow (l/min)
	Water Take	0.00	14.40	0.00	0.00	0.960
4th period	Time (mins)	0	5	10	15	Average
Gauge Pressure	Flow reading	87.0	89.0	91.0	93.0	Flow (l/min)
	Water Take	0.00	2.00	2.00	2.00	0.400
5th period	Time (mins)	0	5	10	15	Average
Gauge Pressure	Flow reading	93.0	93.0	93.0	93.0	Flow (l/min)
	Water Take	0.00	0.00	0.00	0.00	0.000

Period	Flow (q) (l/min)	Gauge Press (kPa)	Gauge Press (m of water)	Friction Loss (m)* Basic	Friction Loss (m)* In extra rods	Total Head (m)	Lugeon Value	Perm. (m/s)
1st	0.107	75.00	7.665	0.000	0.000	38.665	0.070	8.53E-09
2nd	0.333	150.00	15.330	0.000	0.000	46.330	0.184	2.23E-08
3rd	0.960	225.00	22.995	0.000	0.000	53.995	0.454	5.50E-08
4th	0.400	0.00	0.000	0.000	0.000	31.000	0.330	3.99E-08
5th	0.000	0.00	0.000	0.000	0.000	31.000	0.000	0.00E+00

*Where friction loss is assumed to be negligible.

N.B. Pressure Conversion: 1 bar = 100 kPa = 14.503 psi

Note - Test abandonned in 3rd period due to excessive leakage through pressure head

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